WESTBAY
WELL SUMMARY

Location ID: PL-7 Field Representative(s): M. Canavan, D. Menzie, J. Kirby, P. Egan, G. Contaldo

Date Started: 10/13/92 Date Completed: 12/17/92

Northing: 224176.88 Easting: 402274.51

Brass Cap: 4519.12 Outer Casing: 4519.65 Inner Casing: 4520.46

Drilling Method: Mud/Air Foam Rotary Drilling Contractor: Larjon Drilling Co.

Driller: J. Gower

Total Depth Borehole: 662' Total Depth Well Casing: 650'

Total Depth Surface Casing: 80'

Diameter Well Casing: 4" Diameter Surface Casing: 14"

Water Producing (packed-off) Intervals: 475' to 485'

Water Producing (packed-off) Intervals: 555' to 565'

Water Producing (packed-off) Intervals: 625' to 635'

Water Producing (packed-off) Intervals: _____ to _____

Water Zone Detected: 452'-535' Water Level Open Borehole: 450.00' (from nuetron log)

Water Level Cased Borehole: 451.57'

Quik-Foam Use: 38 gallons

Estimated Water Use: 21,300 gal.

Well Casing:

2in x 2ft SCD 80 PVC:	1	= 2	ft	Stainless Steel Well Casing	
2in x 5ft SCD 80 PVC:	7	= 35	ft	4in x 20ft SCH 5 SS:	19
2in x 10ft SCD 80 PVC:	59	= 590	ft	4in x 10ft SCH 5 SS:	1
5ft MP packer:	5	= 25	ft	4in x 5ft SCH 5 SS:	1
Total SCD 80 PVC pipe:		652	ft	4in x 3ft SCH 5 SS:	1

Regular coupling:	62	4in x 20ft SCH 10 SS:	11
Pumping port coupling:	3	4in x 10ft SCH 10 SS:	1
Measurement port coupling:	6	10' extra strength screen:	3
End cap:	1		
Casing Clamp:	1		

Surface Casing:

94# bags cement:	20	bags
50# bags bentonite powder	2	bags

Pertinent Field Notes:

10/12/92	Finished setting up to spud. Starter is bad on BE & can't get rig started. No drilling. - Egan
10/13/92	Replaced starter on rig. Mixed mud & spudded borehole. Drilled 0'-45'. - Menzie
10/14/92	Drilled pilot hole 45'-80'. Reamed to 16½" 0'-65'. - Kirby
10/15/92	Finished reaming to 16½" (65'-80'). Installed 82.4' of 14" surface casing and grouted it in place. - Menzie
10/16/92	Steam-cleaned BE rig, cut off stick-up and welded on deflector pipe. Mobilized air-foam equipment to site. - Kirby
10/19/92	Drilled air foam 80'-170'. - Canavan
10/20/92	No drilling. Larjon repaired air compressor valve. - Canavan
10/21/92	Drilled air foam rotary 170'-435' (9 7/8" pilot hole). - Canavan
10/22/92	Drilled air foam rotary 435'-452'. Blew hydraulic line and had to shut down. - Canavan
10/23/92	Three mud pits filled with water from last nights downpour. Spent day pumping out mudpits. No drilling. - Canavan
10/26/92	Drilled 9 7/8" pilot hole 452'-560'. - Canavan
10/27/92	Drilled 9 7/8" pilot hole 560'-710'. - Canavan
10/28/92	No drilling due to inclement weather. Lined remaining four mudpits. Equipment maintenance. - Canavan
10/29/92	Drilled 9 7/8" pilot hole 710'-735'. Rig down for repairs (rebuild hydraulic pump). - Canavan
10/30/92	No drilling; rig down for repairs. - Canavan

11/06/92 Drilled 9 7/8" pilot hole 760'-804' (TD). Blew hydraulic seal on tophead motor. Down for repairs. - Canavan

11/09/92 Rig down for repairs. No drilling. - Canavan

11/11/92 Tripped out remaining drillpipe from borehole. Changed to 13" reamer bit. Reamed 80'-138'. Blew tophead seal again. - Canavan

11/12/92 Rebuilt and replaced tophead motor on rig. Reamed 138'-223'. - Canavan

11/13/92 Reamed 223'-375' from 9 7/8" to 13". - Kirby

11/16/92 Reamed 375'-650' to 13". Encountered soft zone at ≈ 650' that sloughed in. - Canavan

11/17/92 Reamed 650'-675' to 13". Hole sloughed to 665'. Decision was made to complete at that depth. The only other option was to switch to mud drilling to ream to 804'. This option would be too costly and time consuming. - Canavan

11/18/92 Set up to install 4" casing. Southwest Surveys ran full suite of geophysical logs. Designed well and pumped bottom plug. - Canavan

11/19/92 Installed 658.50' of 4" casing with three screen intervals at 625'-635', 555'-565' and 475'-485'. Installed gravel packs, plugs and filler sand to top of middle screen zone (See completion diagram for details). - Canavan

11/20/92 Finished well completion. Poured first load of grout. - Canavan

11/23/92 Poured second and third loads of grout into annulus. Cleaned up pad. - Canavan

11/24/92 Poured fourth load of grout. Set up and started air jetting of all three zones. 6,500 gallons discharged. - Menzie

11/25/92 Continued development. 12,750 gallons discharged. Grouted annulus to surface. - Kirby

11/30/92 Installed single packer assembly to 528.19' and packed off uppermost screen zone (475'-485'). - Canavan

12/01/92 Started airlifting uppermost screen at .25 gpm. - Canavan

12/02/92 - 12/07/92 Continued airlifting from top screen at .25 gpm. See development sheet for details. Completed development to 4.3 NTU's. 445 gallons discharged. - Canavan

12/08/92 Pulled tremie and assembled double packer assembly. Set packers and 1 joint of tremie in casing before stopping for the day due to inclement weather. - Canavan

12/09/92	Developed second screen zone (555'-565') to 1.8 NUT's. 245 gallons discharged. - Canavan
12/09/92	Developed second screen zone (555'-565') to 1.8 NUT's. 245 gallons discharged. - Canavan
12/10/92	Developed third screen zone (625'-635'). - Canavan
12/11/92	Begin demobilizing development equipment and setting up for Westbay casing installation. - Menzie
12/15/92	Install 652' of Westbay casing. - Menzie
12/16/92	Begin inflating Westbay packers. - Menzie
12/17/92	Finish inflating Westbay packers. - Menzie
12/18/92	Complete demobilizing all equipment and final clean-up at site. - Menzie